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SPECIAL ARTICLES

LE ROB ANTISYPHILITIQUE DE BOYVEAU- LAFFECTEUR

THE HONORABLE WILLIAM RENWICK RIDDELL, LL.D.,
F.R.HIST. SOC., ETC.

THE PUBLIC HEALTH VIEW POINT OF THE TYPHOID EPIDEMIC IN COCHRANE

DR. W. E. GEORGE

INDUSTRIAL HYGIENE AND THE MEDICAL PROFESSION

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Le Rob Antisyphilitique de Boyveau-Laffeteur

BY THE HONORABLE WILLIAM RENWICK RIDDELL, LL.D., F.R. HIST. SOC.,
ETC.,

President, Canadian Social Hygiene Council

NO one can pay much attention to the history of Syphilis and its treatment without recognizing the outstanding fact that an enormous number of remedies were tried—and according to the reporters, with considerable success.

Some of the cures reported were almost certainly of cases of Gonorrhoea and some of Chancroid: but not all were of that character—the descriptions are too clear and characteristic to permit of doubt that many were true cases of Syphilis. Mercury was early used—the Italian Carpi is sometimes credited with being the first to recommend its use: cantharides taken internally was prescribed by Christoph Ludwig Hoffman, and he treated Goethe's friend, Karl August of Weimar, with that soothing drug as an "anti-septic": the salt of vipers with the root of *contrayerva* (*Dorstenia Contrayerva* or *D. Braziliensis*) was also used by some. Another remedy was imported from the New World—Guaiacum—which attained great vogue.

As early as 1508, a Spaniard who had made a voyage to San Domingo returned to Europe with some of the tree and said that he had been cured of the Morbus Gallicus by the savages of that Island by means of it. He had some reputation from his discovery; but his fame seems to be drowned in that of a well-known Spaniard, Gonzalo Hernandez Oviedo y Valdes. Oviedo was sent to San Domingo by Ferdinand of Arragon as Intendant and Inspector-General of the trade of the New World: he had served in the War of Naples, during the course of which the new disease had made its appearance in Europe, and he had observed the fearful ravages it made in the armies. On arrival at his new field of

service, he made diligent enquiry into the native methods of treating the disease which was believed to have come from the West Indies. He published the result in his work "Summario de la Historia general y natural de las Indias Occidentales," Toledo, 1526, dedicated to Charles V. He afterwards made some additions to this work which he published as "La Historia general y natural de las Indias Occidentales", Salamanca, 1535, folio. This was translated into Italian and French. He attempts to prove that Syphilis was endemic in San Domingo, that it went from that Island to Spain and thence to Naples, and he strongly recommended the wood of the guaiacum as a remedy.

Fracastorius' best known work, published at Verona, 1530, "Syphillidis seu Morbi Gallici Libri tres" in which the word of his invention, "Syphilis", first makes its appearance, is substantially a plea for the use of guaiacum. *spectata novis virtutibus arbor: Spes hominum, externi decus et nova gloria mundi*.¹ A more effective piece of propaganda was Ulrich Von Hutten's "*De Guaiaci Medicina et Morbo Gallico Liber unus*", Mainz, 1524,² which was afterwards translated into English by Thomas Paynell and frequently republished both in Latin and in English. Nicolo Massa of Venice, who wrote somewhat voluminously on contagious diseases, including Syphilis, improved on Von Hutten's method and recommended guaiacum although he also used mercury and sarsaparilla. His duodecimo work, "*De Morbo*

¹ See my article "The Origin of the Word, Syphilis", New York Medical Journal and Medical Record, May 4, 1921, and my letter, "Derivation of the Word Syphilis," do. do., November 15, 1922.

² Thomas Paynell (fl. 1528-1567), an Austin Friar educated at Oxford, went on a mission to the Protestant Princes of Germany and there probably met Von Hutten. He translated the well-known "Regimen Sanitatis Salerni" and many other Latin works. His translation of Von Hutten's "De Morbo Gallico" appeared, London, 1833, an 8vo by T. Berthelet—another edition appeared, London, 1730. The work except the title page is identical with "Of the Wood called Guaiacum, that healeth the French Pockes", translated by Paynell, T. Berthelet, London, 1536, 8vo. D.N.B. vol xliv, 127.

Sir John Elyot (ob. 1546) added Hutten's "De Morbo Gallico", translated by Paynell to his 1540 edition of "The Castell of Health Computed out of the Chief Authors of Physick".

The biographers of Ulrich Von Hutten are singularly silent concerning this work—and indeed concerning his diseased condition. He was in the late stages of Syphilis, a mass of corruption and torture, he submitted eleven times in nine years to treatment by mercurial friction and the disease was not even palliated. He then adopted the Carib treatment by guaiacum and "in the usual time" was completely cured—the history of the cure was given in his work dedicated to the Cardinal de Brandeburg, elector of Mainz, "*De Morbi Gallici curatione per administrationem liquidi guayaci*". See also Dr. Dopan's brochure, "Observations sur l'usage des végétaux exotiques dans les maladies vénériennes".

Gallico", dedicated to St. Charles Borromeo appeared at Lyons, 1532, and was frequently reprinted: it had such effect that many of the most distinguished physicians adopted the guaiacum treatment, amongst them Vesalius, Fallopius, Morgagni and Boerhaave.

Others, *e.g.*, Amatus Lusitanus, Nicolas de Blegny, Guillaume Rondelet, etc., recommended squine of which there were two kinds, the Eastern China-root (*China Smilax*, Linn), and the Western (*C. occidentalis*), the former coming from China and the latter from Brazil or Peru: this had an ephemeral vogue, largely by reason of Charles V, having, as he thought, received benefit from it in Syphilis and Gout. But Vesalius indicates that it soon fell into disrepute.

Sarsaparilla seems to have been first recommended by Nicolo Massa in his "*De Morbo Gallico*", although Johann Friedrich Zittmann (the inventor of Zittmann's decoction)³ is sometimes credited with this. His quarto work, "*Medicina Forensis*", appeared at Frankfort, 1706.

Amatus, Hieronymus Mercurialis of Forti (in his "*De Morbis Cutaneis et Omnibus Corporis Humani Excrementis*", Venice, 1579); Riolan, the Italian Cestori, and our own John Hunter, all spoke in laudatory terms of sarsaparilla: and it retained its reputation as a "blood-specific" till our times. It is said that the negroes of the Gold Coast knew no other remedy.

The celebrated Swedish naturalist and traveller, Peter Kalm, found on this Continent the well-known Lobelia used by the Indians who, he says, cured with it all venereal diseases.⁴

Many other vegetable remedies have been recommended—absinthe by Massa and John Ferriar, ebony by Zacutus Lusitanus, genesta by Peter Haschard ("*Curatio Morbi Gallici*", Louvain, 12 mo., 1554), hedge-hyssop (*Gratiola officinalis*) by Kramer, amarantha, galengal, mechoacan (Mexican Bindweed, *Ipomoea Jalapa* or *Convolvulus Mechoacana*, Linn), rosemary (*Rosmarinus officinalis*) Rhapontic, (Monk's rhubarb, *Rheum Rhaponticum*) bistort (snakeweed or adderwort, *Polygonum bistorta*), scabiosa, scorsonere (*Scorzonera Hispanica*, Spanish salsify or goats' beard) blue gentian, borage, bugloss, chamaedris, germander, colocynth, fraxinella, contrayerva—and a score or more of others.

But mercury held its own—administered in the liquors of Pressavain or Weikard (of Fulda), the white drops of Joshua Ward (although the

³ The Decoctum Zittmanni was much employed in Germany in Syphilis—it is composed of sarsaparilla, pulvis stypticus, calomel and cinnabar boiled in water with aniseed, fennel seed and liquorice root—Zittmann had a stronger and a weaker solution.

⁴ Not in his "Travels" but in his less-known "Recueil de Mémoires de l'Académie de Stockholm", 1750; Kalm was a favorite pupil of the celebrated Linnaeus.

drop and pill of this famous quack were said to contain antimony), the tisanes of Callac and Seltz, the ointments of the syphilographers, José Ignacio de Torres and Dom. Cirillo (of Naples, not his namesake, Nicolas Cirillo of the same place, the hydropathist), the powders of Goderieaux, the washes of Royer and Ferrand, the comfits of Keyser, the pills of Plummer, Brugnatelli, Renou, Moscati, Belloste, the syrup of Bellet—mercury in one form or other never lost its place as a specific, quack or regular. The well-known evil results from its use, salivation and worse, continually stimulated efforts to find a substitute; and there were many such put forward, some by physicians, some by quacks, more or less notorious.

One of the most celebrated of these was Le Rob^s Antisyphilitique de Boyveau-Laffecteur.

This was a secret remedy like most of the other specifics, and was the discovery or invention of a French pharmacist, Boyveau. The place and date of his birth are uncertain: but the date was about 1745. He studied pharmacy, and, while still quite young, served as pharmacist in the Seven Years' War terminating in 1763. He says that being in despair at the little success he saw follow the use of mercury in the treatment of Syphilis, he determined to search the vegetable kingdom for a more certain and less harmful remedy. Some medical men who knew Boyveau and knew his slender attainments in medical science, always contended that he did not make the discovery himself.

However that may be and whether he owed the discovery to others, it seems fairly clear that no one had employed the same remedy against Syphilis, no medical work made any mention of such a remedy and all robs of previous manufacture differed from it essentially. The composition was long unknown if it can be said to be known even yet.

It was called a "rob", *i.e.*, the juice of a fruit or fruits reduced by boiling to the consistency of syrup and preserved with sugar.

He first manufactured this antisyphilitic rob in 1764, shortly after the close of the War, and distributed it under the name Laffecteur, the right to use which he bought for a sum of money paid annually to the rightful owner of the name—later on, in 1793, during the Revolution, when the fortune of his rob had been made, he resumed his own name to which he added the other calling himself Dr. Boyveau-Laffecteur.

^s "Rob" was once a word in good English use but is now rare and provincial—it comes through the French "Rob" from the Spanish and Portuguese—the ultimate source is the Arabic robb or rubb, or Persian rob or rub, fruit syrup. Much of the information is taken from an exceedingly interesting brochure: "Précis Historique et Observations sur les Effets du Rob Antisyphilitique de Boyveau-Laffecteur, Docteur en Médecine Paris 1843", paper 8vo., pp. 144.

The medicine had an almost immediate success and returned to the fortunate inventor, or at least proprietor, a very large revenue. In 1776, he presented himself to the Intendant of Paris and asked for the appointment of Commissioners for the purpose of proof by actual experiment of the antisyphilitic properties of his nostrum. The experiment was made at the St. Denis Barracks under the direction of two competent Commissioners, MM. Poissonier-Desperrieres and Lebreton, a very distinguished surgeon of Paris.

Every precaution was taken against fraud, the three patients selected for treatment were kept in one room which could be opened only by three keys, one in the possession of each commissioner and one in that of Laffeteur: a sentinel was placed at the outer door and one within the room: the medicine was placed in a cupboard which could be opened only by three keys held by the commissioners and Laffeteur respectively. The rob was taken and made into a tisane—Laffeteur taking no part in the preparation—and administered to the patients. All three patients who had been selected from among the most dangerously affected were perfectly cured at the time mentioned in advance by Laffeteur.

Another test was decided upon on a greater number, and twelve patients at Bicêtre were selected, who were in a deplorable condition and upon whom all known remedies had been employed without success.

The commissioners chosen were eleven of the most noted medical men of Paris, men above suspicion and certainly not prejudiced in favor of the remedy.

All the twelve patients were radically cured: and the report of the commissioners was unanimously in favor.

The curative effect of the rob being now established, it remained to determine the absence of mercury. Two of the most celebrated chemists of Paris, MM. Darcet and Bucquet, made an independent analysis and both reported that they could find no trace of mercury in the rob.

The secrecy of the remedy furnishing arms to the opponents of Laffeteur's claims, he disclosed the composition to De Lassone, Chief Physician to the King, who made up the medicine himself and administered it with most satisfactory success. De Lassone asked the Royal Society of Medicine of Paris to make experiments and report: the Society named seven commissioners who had the medicine prepared by Maquer, the most skilful chemist of his day. Twelve patients were selected who offered the least hope in the hospitals of Paris: they were treated by the commissioners with the rob made by Maquer alone and they were all cured. The report of the Society stated (1) that there was no mercury in the rob, (2) that Laffeteur's remedy could cure confirmed and desperate venereal diseases, (3) that Laffeteur's method did not exclude other methods, and (4) that being desti-

tute of mercury, his remedy had not the inconveniences and evil after-effects of mercurial preparations.

Laffecteur in 1781 was directed to supply his remedy for war-time hospitals and the navy: practitioners used it freely in the most desperate cases and with uniform success.

Boyveau survived the Revolution and died in 1812 having made a fortune by his rob.

Both during his lifetime and since, he has been acclaimed a vile charlatan and also as a noble discoverer—all kinds of guesses have been made as to the composition of his rob, some contending that it contained mercury and attributing its effect to that cause.

It continued, however, a secret or a comparative secret; and many formulae were given for its composition. Bonchandat makes it contain sarsaparilla, senna leaves, aniseed, cinnamon, syrup of elder, sugar and water. If so, there was no new antisyphilitic ingredient employed by Laffecteur—all these had been used long before his time.

The Public Health View Point of the Typhoid Epidemic in Cochrane

BY DR. W. E. GEORGE.

(Read at Annual Meeting, Ontario Health Officers' Association, May, 1924.)

THE epidemic in Cochrane in 1923 was the greatest Public Health failure that has occurred in my territory since the Province was divided into Health Districts. It was only natural that such a Public Health catastrophe should have resulted in accusations being made against the Provincial Board of Health and against the District Officer in particular (even by some uncomfortably closely connected to the Department); while in other and more official circles the town was held as chiefly responsible for the inaction which resulted in the epidemic. Now it is my intention to present the evidence to the Health Officers of the Province and allow them to draw their own conclusions. These conclusions will represent the official opinion of the Province. The information presented is my own collection and was gathered on the ground after careful study of the whole situation and it has in no way been influenced by the Departmental heads.

It is not the whole purpose of this paper to whitewash or to blame the Provincial Health Department, the town or their officials. The history of the epidemic and the statistics which were gathered are, to my mind, of scientific interest to the association which is responsible for the health of the Province; since, what affects the health of the people in any part is of interest to all officials of Ontario responsible for the enforcement of preventive measures.

SOME DISTINCTIVE FEATURES OF THE TYPHOID EPIDEMIC IN COCHRANE.

March, 1923, made its contribution to history, as far as communicable diseases in Ontario is concerned, because during this month there occurred the most severe outbreak of Typhoid at Cochrane that has darkened the horizon of preventable disease control in this Province in many years. The outbreak outlined in this short paper began early in March and continued to the middle of May. The cause was found to be the pollution of the water supply with typhoid laden sewerage. The sewerage could not have reached the lake from which a large part of the water supply was taken, under ordinary circumstances without flowing up hill. The conditions were exceptional. There had not been one day's thaw from the first of the year to the last day of February. The

weather had been steady and cold, requiring from 35 to 50% increase in pumpage to supply waste necessary to prevent freezing of water pipes. The result of the lake's share of this excessive demand was a drop in level of about four feet, so that instead of being two feet above the outlet, it fell actually two feet below it. A reverse flow was thus established from Junction Lake, which in its turn received the flow from Mill Lake, which receives the sewerage. One good day's thaw would have filled up the lake and corrected the water levels. There was nothing in the previous history of the lake that the engineers who have studied the problem, could have reasonably used to warn the municipality. The municipality has had four engineers acting for them at different times, while the Provincial Board has had three or four of its Sanitary Engineering Staff on the ground—that none of these men issued a warning indicates the elusiveness of the contributing causes. It is my opinion that the Sanitary Engineers of the Provincial Board of Health are second to none in Canada or United States and yet, although several of them had gone over the levels or were familiar with them, the margin of safety was thought to be ample. The Provincial Board was, therefore, as much without information as to the menace to the town's water supply as were the municipal authorities. It is only fair to the officials of the Provincial Board to point this out since many of the citizens of the town had reached conclusions from press reports, that the Department was aware of the danger and had neglected to take the necessary protective measures. It is true that for other reasons entirely the Chief Officer had, about a year before this, strongly recommended chlorination of the water, but these reasons did not appear to him sufficient to require a compulsory order. To suggest that the Department was cognisant and forewarned of the danger and took insufficient action is as inconceivable as it should be from a consideration of the facts. Now to be fair to the municipality, the Provincial Board must admit that no warning had been given of this danger, so that the blame cannot be left at their door. It is entirely begging the question to hold the officials of the town responsible for such a catastrophe just because they had not immediately installed a chlorine plant which was recommended to them by the Board for the correction of another matter. Indeed under such circumstances the Department would have to shoulder a large part of the responsibility for not having replaced the recommendations with an order. Even if the responsibility of the recommendations is admitted, the town had not been neglectful of them for provision had been made in a by-law for the extension of their water service, and for a chlorine plant. By-laws for the extension of water systems involving the expenditure of large sums of money do not become law until the specifications have been carefully considered

by our Engineering Division. As a result, frequent adjustments are often required before the by-law is ultimately approved. In order to prevent waste in the quality and efficiency of the installation, Cochrane's by-law required certain changes; and the Director of our Engineering Division had made a special trip to the North to lay before the municipal authorities the changes necessary. It was thought that such action would facilitate the immediate approval of the by-law, but further complications arose until the weather made construction impossible. Therefore, before the town obtained the protection of chlorine equipment, which would have effectively prevented the epidemic, the water supply became infected with the results I am about to describe.

The epidemic was preceded by an outbreak of dysentery. The dysentery suggested the pollution of the water supply, which was subsequently (on the 21st of March) proven by the local Engineer, Mr. Laning, to be a reverse flow from the sewerage laden Junction Lake. Mr. Laning's investigations were influenced by recommendations from the Director of our Division of Sanitary Engineering, Mr. Dallyn. The absence of typhoid at this time indicates the absence of typhoid organisms in the town sewerage. The origin of the bacilli which produced the epidemic was difficult to locate in so far as the damage had been done some seventeen days previous, or before the incubation period. I will afterwards show that the average incubation was seventeen days. The origin can therefore only be surmised. The history of typhoid in Northern Ontario just preceding the Cochrane epidemic is very suggestive and, in my opinion, explains a very probable continuity with the explosive outbreak at Cochrane, which followed in sequential order.

At the construction of a dam at Sandy Falls on the Metagami River, 6 or 8 cases of typhoid occurred about the middle of December, 1922. About three weeks later, beginning January 6th, a limited outbreak of typhoid occurred in Smooth Rock Falls, which obtains its water supply from the Metagami River lower down. The Smooth Rock Falls outbreak continued into March. The Cochrane epidemic began early in March. It is known that some six cases came down from Smooth Rock Falls to Cochrane, where they were treated in their homes or in the hospital. Cochrane is some 33 miles from Smooth Rock Falls.

In company with our Chief Engineer, Mr. Dallyn, I arrived in Cochrane on Sunday, March 11th, 1923. Up to Saturday, the previous day, there had occurred 15 cases. On the 12th Mr. Dallyn wired one of his staff to bring a chlorination plant to Cochrane. Mr. Berry brought the plant and had it in operation on the 15th. The total number of cases which were reported in the town during the epidemic was 832. The number of deaths was 59. From outside points we obtained records

of almost exactly 100 cases and 13 deaths, making a total of 932 cases and 72 deaths. Our statistical survey of the town was intentionally left until the epidemic was petering out and for this reason we were unable to obtain records of many who had left for their homes in other places immediately upon convalescence. Below are the records for the survey and also for the completed totals.

| | Survey totals | Completed totals |
|--|------------------|---------------------|
| Population 2,400 | | |
| Number of typhoids | 792 | 832 |
| Number of deaths | 56 | 59 |
| Number of Secondary cases | 217 | 257 |
| Number of Primary cases | 575 | 575 |
| Number inoculated once | 207 | ..... |
| Number inoculated twice | 777 | ..... |
| Cases developing after first inoculation | 99 | 99 |
| Cases after second inoculation | 75 | 75 |
| Number inoculated where typhoid did not develop | 810 | 847 |
| Typhoid cases who were not inoculated | 618 | 658 |

The age groups affected were particularly those between 5 and 25 years. Males and females were affected equally. Most of those inoculated who afterwards developed the disease had a shorter illness and a speedier convalescence than the others.

One of the most frequent accusations made in regard to the control of the epidemic was that it dragged along unnecessarily. Let us consider the figures. The incubation period is usually stated from 5 to 40 days, with the average being two weeks. The evidence from the weekly returns would indicate that the incubation period in the Cochrane epidemic probably averaged 17 days. In confirmation of this, I give the weekly returns. Kindly keep in mind that the chlorination plant began on the 15th of March.

| | |
|--|-----|
| Total cases up to March the 10th | 15 |
| Week 10th-17th, new cases | 50 |
| " 17th-24th, new cases | 301 |
| " 24th-31st, new cases | 152 |
| " 31st-April 7th, new cases | 142 |
| " April 7th-14th, new cases | 90 |
| " April 14th-21st, new cases | 35 |
| " April 21st-28th, new cases | 13 |
| " April 28th-May 5th, new cases | 18 |
| " May 5th-12th, new cases | 14 |
| " May 12th-15th, new cases | 2 |

Our returns were not collected daily until March 24th. On this date there had occurred since the beginning of the epidemic 366 cases. Below are the daily returns from March 24th.

| | | |
|--------------|--------------|--------------|
| March 24—366 | April 11—723 | April 28—798 |
| 25—380 | 12—727 | 29—802 |
| 26—401 | 13—739 | 30—805 |
| 27—427 | 14—750 | May 1—812 |
| 28—448 | 15—755 | 2—814 |
| 29—477 | 16—759 | 3—815 |
| 30—505 | 17—766 | 5—816 |
| 31—518 | 18—775 | 6—816 |
| April 2—564 | 19—776 | 7—816 |
| 3—580 | 20—783 | 8—821 |
| 4—597 | 21—785 | 9—822 |
| 5—621 | 22—786 | 10—823 |
| 6—643 | 23—787 | 11—825 |
| 7—660 | 24—788 | 12—826 |
| 8—677 | 25—792 | 13—830 |
| 9—693 | 26—794 | 14—830 |
| 10—713 | 27—796 | 15—832 |

You will note from the weekly returns the remarkable drop in the incidence of cases following April 7th. And if you examine the daily returns you will observe that there was a considerable drop after April 2. Because of the explosiveness of the epidemic, I am of the opinion that we were ahead of nearly all secondaries on the 2nd of April, 17 days after the commencement of chlorination. The accumulation of cases in the homes of the people made possible the greatest number of exposures after this date and therefore the greatest number of secondary cases. Only 200 of the 832 cases were treated in the hospital. If 17 days is taken as the incubation period we may add this on to the 15th of March. This brings us to the 2nd of April, upon which day there were 564 cases. Now to this must be added the secondaries which totalled 257. This gives 821 cases. The balance was likely made up of cases with an incubation period longer than 17 days. We have evidence in one or two cases where the incubation was at least 28 days. For example, a school teacher who teaches in New Liskeard had been away from Cochrane 28 days when she showed the first symptoms of the disease.

It must, however, be mentioned here that although the chlorination began on the 15th of March, the lake was not cut off as a source of water supply until the 21st, immediately upon Mr. Lanning's discovery of the reverse flow from Junction Lake.

I believe then that the evidence submitted is conclusive and that except for the secondaries over which we had but little control, the epidemic came to an end 17 days after the beginning of chlorination. The many large families living in three or four rooms was an insurmountable difficulty to the control of the number of secondary cases. It was found impossible to persuade a mother to allow her child to be taken to the hospital until she herself became ill. We need legislative authority to compel the removal of typhoid cases from the crowded home if we are going to be able to produce a better record in future typhoid epidemics.

The importance of inoculation was given careful consideration. Our experience indicates that anti-typhoid vaccination administered during the incubation period was rarely successful in preventing the development of the disease. In those that had their second inoculation two weeks or more before becoming ill, the disease had a shorter course with lower temperature, while the convalescence was speedier. Note that 174 developed typhoid after being inoculated, which was nearly 20% of the total who developed the disease. Some became ill at least four weeks after inoculation. We have the history of nine such cases, two of which received old vaccine. A public station was opened at the emergency hospital for free vaccination. Visits were made from house to house by a nurse and a returned soldier, who had had experience overseas, offering free inoculation in their homes to all who would accept. Unfortunately at the beginning the Medical Officer of Health did not support this procedure, but later we had the assurance of his complete co-operation as he put a notice in the local paper advising all those who had not already been inoculated to comply immediately. The effort was worthy of commendation, but it resulted in only 37 others being vaccinated, although the house to house canvass was repeated.

Dr. R. R. McClenahan, our capable epidemiologist, came to Cochrane at my invitation in order to study the measures in use, correlate statistics and give us the benefit of any suggestions he thought would assist in speedier termination of the epidemic. I am indebted to him for valuable assistance and advice at the time, and also for kindly providing important information in preparing this paper.

Early in March, Miss Power of the Division of Maternal and Child Welfare took from her staff in the various Health Districts of the Province nine Public Health nurses, which were sent to Cochrane under the able supervision of Miss Hamilton. Their first efforts were directed toward a complete sociological survey of the town. We obtained records of the occupants of every home. These were filed at the town hall according to streets and were available to the chairman of the Board of Health and other Public Health and relief officials.

The information contained in these records was as follows:

Name,
Address, Side of Street,
Health of
Father,
Mother,
Children—Number,
Ages,
Sickness,
Sick since,
Attending Physician,
Visiting Nurse,

DATE OF NURSES' VISITS,

FINDINGS.

—
—
—
—

EMERGENCY ASSISTANCE WORK,

Occupation, Employer
Out of work? Since,
Normal income? Tenants?

Remarks,

First notice,

Date,

Needs: Food? Clothing? Fuel? Bedding? Laundry?

Sanitation,

Assistance given: Credit \$..... Merchant.....

Date of Relief Visit, Findings.

—
—
—

When a new case occurred in a family not previously affected, the officials by reference to this file knew immediately the necessity or otherwise of providing relief. Our Public Health Nurses gave special attention to the homes of the sick, advising preventive measures necessary to guard against secondary infection, especially disinfection of the hands, bed linen and excreta. The attendants were warned of the danger to children coming in contact with the patient. Occasionally it was necessary for our nurses to step into an emergency and do bedside work when a solution by other means seemed impossible. After the epidemic, Miss Hally continued the educational work to the close of the year. It is interesting to note that Miss Hally's survey indicated that the percentage

of defects among children were almost double among those who had typhoid as compared with those who had not.

By a study of the completed records of the sociological survey certain important facts came to light. If we classify all families in groups according to the number of each family and indicate the number of typhoids occurring in each group, we obtain a comparative table revealing the incidence according to the increase in the number in the household. The increase is, of course, what might be expected and illustrates an important cause of secondary cases. It is unfortunate that our records were not sufficiently complete to enable us to further analyse the groups according to incidence per number of rooms in each home. The incomplete records available indicate that the larger the family and the fewer the rooms, the higher was the rate of incidence in the families.

Below is a list of the number of families in each group, showing the proportionate incidence of typhoid:

| No. of Families. | No. in Family. | Total No. of People. | No. of Cases. |
|------------------|----------------|----------------------|---------------|
| 67 | 2 | 134 | 36 |
| 86 | 3 | 258 | 70 |
| 80 | 4 | 320 | 102 |
| 80 | 5 | 400 | 101 |
| 67 | 6 | 402 | 152 |
| 44 | 7 | 308 | 107 |
| 26 | 8 | 208 | 79 |
| 21 | 9 | 189 | 61 |
| 13 | 10 | 130 | 38 |
| 4 | 11 | 44 | 17 |
| 11 | 12 | 132 | 0 |
| 1 | 13 | 13 | 5 |

Milk bottles were found in frequent use as drinking utensils at the bedside of typhoid patients and for this reason, as well as the fact that the dairies have no mechanical appliance for the sterilization of bottles, dairymen were forbidden to allow bottles to enter houses. They were required to pour the milk into a container at the consumer's door.

The Provincial Police kindly offered their services as sanitary officers. This solved for us a very difficult problem as the favorable impression of the Police uniform in obtaining compliance with orders relating to sanitary measures, was desirable. This indicates the valuable co-operation we are consistently receiving from the Inspectors of the Provincial Police and their men. House to house visits were made by them and written instructions given for the correction of unsanitary conditions, such as the collection into receptacles of frozen garbage and filth. Where typhoid existed in a house, the excreta was ordered to be placed in water-

tight containers and thoroughly disinfected. These were collected and emptied by the municipal scavenger service every forty-eight hours. Particular attention was given to that portion of the town outside of the sewer area. Every privy was thoroughly cleaned and disinfected with chloride of lime. I accompanied the Police Officers for the first day in order to see the difficulties most commonly encountered and to assist them in adopting uniform and efficient measures for dealing with these difficulties.

The emergency hospital was established on March 19th. The Knights of Columbus generously offered Lake View Hall with any or all of its equipment. Such an act is deserving of special mention and is worthy of the widest publicity and commendation. Their kind offer was promptly accepted. The institution at the high tide of the epidemic contained 87 beds and had a staff of 22 nurses. The work entailed in obtaining on short notice sufficient equipment and staff for an emergency hospital of these dimensions was a herculean task exceptionally well performed and entirely to the credit of the Mayor. Mr. Russell's foresight and devotion to duty for eighteen to twenty hours a day made very satisfactory provision for large numbers of typhoid cases which the following five weeks were to provide. He was the only functioning member of the Local Board of Health and the work took most of his time. The Medical Officer of Health was more than occupied with his practice while the third member of the Board of Health had not been appointed for the year 1923. The Mayor was so over-wrought with the town's affairs that his health broke down under the strain. For the balance of the year Mr. Russell was unable to follow his business of Railroad Engineer, and I am afraid but little thanks has been accorded him, even by those who profited most from his wisdom, energy and efforts. I was most grateful to him for his courtesy and for the prompt and effective manner in which recommendations were put into action. On March 27th Mr. J. M. Beemans was appointed a member of the Local Board of Health by the Council, whereupon he was elected chairman. From this date to the end of the epidemic Mr. Beemans assumed a full sized man's share of the responsibilities connected with the Municipal Health Machinery. The business methods which were promptly introduced and the ability displayed in systematizing and co-relating the records was striking confirmation that their choice was made with due regard to the magnitude of the work which such a position entailed. Besides efficiency, Mr. Beemans brought with him a congenial temperament which made for confidence and security. Indeed, there promptly developed among all those connected with Health effort in the municipality a feeling of stability, based upon mutual trust and understanding.

Below is a list of a few of the many matters which occupied the constant attention of the Board of Health during these momentous times:

1. Maintenance of a bureau for securing private and district nurses. Dr. McCullough's co-operation in this matter at all times of the day and night is deserving of favorable mention.
2. Supervision of emergency hospital supplies.
3. Administration of municipal assistance to needy cases.
4. Direction of the Sanitary Squad.
5. Control of the water supply including chlorination and careful supervision of water carts, which delivered water about town from artesian wells in the country.
6. Protection of the milk supply from typhoid handlers.
7. Inspection of dining rooms, restaurants and refreshment parlors in order to prevent those who had typhoid from handling or preparing food.
8. Inspection of bakeries in order to protect the public during the process of manufacture and delivery of bread.
9. Provision of supplies and personnel for house to house vaccination.
10. Direction of the Public Health Nurses.
11. Direction of the Sanitary Policemen.

Early in the epidemic an arrangement was entered into between the physicians of the town and the Council, in which the physicians were to give prompt attention to all cases whether able to pay or not; for which the Council agreed to assume financial responsibility for all accounts not collectable after sixty days. The imposition which would have been placed on the Board of Health had they imported physicians for the emergency decided them to encourage the local physicians to assume full responsibility for the Medical Service. There were two Medical practitioners in the town at the time, Dr. Biron, Medical Officer of Health, and Dr. Fraser. Dr. Biron imported one assistant and Dr. Fraser five. Beside these, Dr. Fortin came and located in the town during the height of the epidemic. As a large number of citizens were unable to pay for the services of a private nurse, each physician secured ten to fifteen nurses to each of whom were assigned four to ten patients. Counting the private nurses, there were over 65, beside 5 Public Health nurses.

The Provincial Government voted \$20,000 to the town to be advanced through the Provincial Board of Health. The value of this help to the town can hardly be estimated, but it most certainly relieved the town of the overwhelming responsibilities which would otherwise have blocked all progress. The opinion has frequently been expressed that Government

funds rarely are directed into channels that give more promise of large returns than obtained from the \$20,000 spent in preventing Cochrane being engulfed financially after the physical torture which it had endured. The only objection I had to it was that I was made responsible for its expenditure. The money was put in the Bank to my order. Money can be a trouble maker, especially to the one who is doling it out. However, the money was spent and up to the present there have been no questions asked.

On the 26th of April the Red Cross took over the management of the Emergency Hospital. They used the equipment provided, but assumed all expense for any additional requirements. They paid the nurses' salaries, provided medical supplies and food. They also provided relief in the form of food, medicines, disinfectants, sheets, pillow-cases, bed pans, clothing, etc. They provided a supply of larvicide for the control of flies and three hundred fly-tight buckets for handling excreta of typhoid cases outside the sewer area. Their contribution was very substantial and was of great assistance in measures of the final clean-up.

In conclusion, let me say that the physical examination of the children who have had typhoid indicates that they are much below those who had not. They require much medical attention and nursing supervision if the children in Cochrane would be prevented from growing up with physical handicaps. Tuberculosis is not uncommon in the second and third year following attack. The Provincial Board, by retaining Miss Hally, one of the Public Health nurses, in Cochrane for six months, and afterwards following up with Dr. Bell's clinic, which was continued for two weeks, has revealed the exceptional prevalence of defects among children who had the disease. A few of these were corrected, but many are in need.

Industrial Hygiene and the Medical Profession

BY J. G. CUNNINGHAM, M.B.

IT is a fact too little realized that industrial workers lose four or five times as many days from sickness as from industrial accidents. This, after all, is what in the nature of the case one would expect and the fact only comes as a surprise because of the attention that has been paid to the prevention of accidents while, in this country, the task of preventing sickness has practically been ignored. Yet it is estimated that at least half of the total sickness in industry is preventable. The reasons that great efforts have been made towards accident prevention are not hard to see. In the first place, the effects of accidents, being more concrete and localised than the effects of disease, are more challenging; in the second, the connection between cause and effect is more obvious; in the third, accidents are, in the nature of things, more easily preventable; and in the fourth, there is no difficulty in knowing whether an accident was caused by some occurrence in the plant or outside of it, whereas as regards almost all sickness, it is difficult to say positively whether it was caused by plant or home conditions. Such considerations account for the primary concentration on accident prevention rather than sickness prevention, and at the present time the fact that the employer has to compensate his workers for their industrial accidents provides an incentive to accident prevention, whereas except for certain specified occupational diseases, there is no similar incentive to prevention of sickness.

The present distribution of effort in favour of accident prevention rather than sickness prevention is accordingly understandable, but it is impossible to get away from the fact that in virtually ignoring sickness prevention the bigger factor in the problem of lost time is being ignored. Sickness causes up to five times as much lost time in industry as do industrial accidents, or, put another way, it amounts to 9 days per industrial worker per year. Experience in the United States shows indisputably that such figures do not represent the irreducible minimum. Perhaps the most striking evidence that sickness prevention is possible is to be seen in the fact that purely commercial concerns such as life insurance companies find it profitable to organize medical service and to conduct health campaigns. The extension of the life of each one of their policy holders is of money value to such concerns and they are evidently convinced that life can be considerably extended and sickness to great part prevented.

As regards means of prevention, the obvious method is to bring those who are already concerned with the prevention and care of sickness into closer touch with the industrial worker; that is to say, to make medical science serve industry as a whole systematically and steadily instead of only occasionally serving industrial workers individually. Now the service that medical science can and should render to industry is of two sorts: first, general health supervision, and, second, scientific research and investigation into the especial health problems presented by use of industrial poisons.

The most important thing under general health supervision is the placement of workers according to their physical capabilities. The practice of requiring employees to be physically examined on engagement is spreading rapidly in the States, its object being (1) to prevent workers with disabilities from being employed at jobs which will intensify their disabilities and to place them at work within their capacity; (2) to prevent the engagement of workers with contagious diseases which would spread to other workers. A second task of this general health supervision of working conditions in so far as they bear on health; that is, supervision of all the factors in factory environment—ventilation, light, heating, plant cleanliness, sanitary facilities, provision for food, seats, etc. Further, health supervision includes the control of epidemics, first aid treatment of minor illnesses before they develop into serious illnesses, and general health education and advice. Special attention would be paid to workers in processes which expose them to poisonous substances whose health would be examined periodically with a view to catching early symptoms of poisoning and preventing the development of serious conditions.

The second service that medical science should render to industry is scientific research into the effects of industrial poisons on the human body with a view to prevention. This is a very wide field and a great deal is being done in other countries. For Canada at the moment the important thing is that the knowledge collected in other countries, both by research and by practical experience, should be available for Canadian industry and that it should be applied for the prevention of occupational diseases.

The Division of Industrial Hygiene of the Provincial Board of Health of Ontario was formed to promote the health of industrial workers, and, as a means of doing this, to make the fruits of medical science available for industry. Accordingly, its chief aim is to bring physicians into closer touch with industry and in general to further the development of industrial medicine as a recognized branch of general medicine with distinctive problems of its own. At the present time there are relatively few indus-

trial physicians in the field and accordingly the greater need for co-operation and mutual assistance between them and the Division. The Division has an exceedingly complete library covering every aspect of industrial hygiene with especial reference to occupational disease. It is ready at any time to act as an information bureau for industrial physicians, or others, and also to co-operate in research into any occupational disease problem calling for special investigation. At the same time it is most desirable that information on the actual health conditions of industrial workers and especially the incidence of occupational diseases should be co-ordinated. If industrial physicians, both full-time and part-time, and also general practitioners with industrial patients would report all cases of occupational disease, whether compensatable or not, to the Division much valuable material would be collected.

The Medical Officer of Health: His Duty to the Public and the Profession

BY DR. J. FENTON ARGUE

ON behalf of the Ontario Medical Association, I extend you greetings, and likewise as one of your own number, for I have been a Medical Officer of Health of a rural municipality for over a quarter of a century. This is an education in itself, as no one knows the workings of the mind of a rural Local Board of Health unless through long experience, and yet one is often surprised with the assistance that goes with honest endeavour in these cases. I wish to talk with you for a short while as to our duty as Medical Officers of Health to the public, and to the rest of the profession. The time has come when the public takes a strong interest in all matters relative to public health. For this reason the Medical Officer of Health of to-day needs to be an up-to-date practitioner. He must see his civic duty and do it. He needs must take a leading part in all welfare means, for which his special education surely fits him. He should belong to the local Antituberculosis Association, the Red Cross, assist in all child welfare and school inspection work, pure milk campaigns, education of mentally retarded children, and other forms of benevolence too numerous to mention. Our profession as a whole have left these interests too much to the laity, and as a result sometimes there is much overlapping of work and reduplication of effort. We must no longer hide our light under a bushel. Our profession has many examples of its members giving their lives in research work in order that the world may be safe for humanity. Let the public know at what cost yellow fever, malaria, bubonic plague, sleeping sickness, and Asiatic cholera have been overcome. We must take the public into our confidence. Even in the matter of vaccination the majority of us feel we have done our duty when we notify the parents that the newborn babe should be vaccinated. The mild type of smallpox prevalent for many years has at last, as often predicted by medical men, taken on a more virulent type. This mild type of smallpox has made the public careless and many people stated they would as soon have had the smallpox as vaccination. We must preach vaccination in and out of season. The antivaccinationists with their distorted reports are never at rest. The recent epidemic about Windsor is an example of what may happen to the unvaccinated. Out of 39 cases of smallpox among the unvaccinated there were thirty-two deaths, a mortality of 82%. We must drive facts like

these home while they are fresh in the minds of the public. While the Provincial Board reported the facts re Windsor widely, the free discussion of them with our individual patients would carry great weight. And then again the operation of vaccination should be done most carefully. The instructions issued with the virus are entirely adequate, but familiarity often breeds contempt, and at the risk of being trite I would repeat that we should warn our patients that there will probably be some reaction within a few days, and of the necessity of resting during that period. That, with a warning of the danger of outside infection, will save many cases from trouble and ultimately do away with one of the great objections to vaccination. With a virulent type of smallpox in the province we should strongly urge vaccination. And let me remind you that no legal means will enforce compulsory vaccination at this date. Public opinion is too strong against compulsion in any form to be successful. The best means at our disposal is education, and this can be best carried out by free discussion and publicity, and taking the public into our confidence.

In the combatting of diphtheria the public should be fully informed of the efficacy of the Schick test. With an enlightened public, the mortality from diphtheria should be practically nil. The Schick test followed by toxin-antitoxin immunization is a great step in advance in the prevention of diphtheria.

Another fact which should be brought home to the public is the mortality following complications in measles and whooping cough. To the lay mind these seem mild diseases, and it is only when statistics from a series of cases are considered that the number of deaths which might be avoided is appalling. Full publicity as to the cause and method of infection in these cases together with the absolute necessity of early quarantine should prove beneficial. It is a well known fact that an incipient case of either measles or whooping cough may infect a whole class room in school before a diagnosis is made. Our mortality rate in these two diseases could be considerably lowered by a concerted action on our part. The figures are even higher than given, as the exciting cause of the broncho-pneumonia, otitis media, etc., is not stated on some death certificates. The methods used to make practitioners familiar with the use of insulin appeals to me and I often think if our Provincial Board gave short refresher courses in the most recent Public Health activities, they would be well attended and amply repay the time and money outlay. Also I commend to their consideration the Health Bulletin issued by Dr. Hastings, Medical Officer of Health of this city. It contains a wealth of information on various health subjects, and the

subject matter could be changed to suit more especially rural municipalities.

And now I come to a subject which concerns chiefly rural municipalities. I mean the annual survey of school buildings and grounds. I think also that the amount of money granted for up-to-date school buildings and grounds, water supply, and closets, should be increased and only paid on the recommendation of the Medical Officer of Health. At the present time for class "A" buildings where we have one teacher the amount of the school grant is only thirty dollars. I do not advocate the reduction of the total amount of money granted to schools, but I would suggest that a greater share of it be granted, subject to the recommendation of the Medical Officer of Health. The Department of Education has some sort of travelling medical clinic for the examination of school children in rural municipalities. This no doubt does good work, but I think when the whole system of medical inspection of school children, and the work of school nurses is entirely under the Department of Health, much better results may be expected. This branch of the work is entirely a Public Health matter, and is not in the realm of education.

At the present time the Department of Health is making a survey of the province to ascertain the areas in which medical attendance is insufficient, and as far as possible the amount of unattended sickness due to inability to obtain medical attendance. The increased infant mortality in areas without adequate medical attendance has been brought out by figures collected by Dr. F. J. Farley of Trenton, who shows the high mortality suffered in the northern portion of Central Ontario among women unable to obtain proper medical attendance during delivery. In one area of forty by thirty miles there were three registered practitioners and one trained nurse to supply trained medical attendance for that whole district. The medical director for the Ontario Division of the Red Cross writes me:

"Up to the present time, although we have established several hospitals, the only point at which we have an outpost where there is no doctor within twenty-five miles is in the northern part of Haliburton County. At this point we have conducted a nursing outpost for a little over two years. We have placed in charge of that outpost the best qualified nurse which we could secure, and she has been obliged to give a considerable amount of attendance upon the sick without being able to secure any other professional help. The nurse has definite instructions, however, never to conduct an obstetric case or to attempt to do any other definite medical professional service if medical help can be secured at all.

"However, as a practical fact, she is called to attend many obstetric cases, particularly during the winter and early spring months, when it is not possible for the nearest doctor, twenty-five miles away, to reach the patient, and consequently she is the only professional person present.

"In addition to this, she does do a great many dressings and minor services with regard to the sick under the direction of the doctors living nearest to her.

"Two doctors particularly have come in vital touch with her work during these years, and both of them are highly pleased with the professional ethics maintained and with the results of the work being done.

"The visits made by this nurse in 1923, all of which were practically entirely under the direction of a physician, were as follows:

| | |
|------------------------------------|-----|
| Medical | 188 |
| Surgical | 76 |
| Infant and Child Welfare | 64 |
| Pre natal | 29 |
| Obstetrical | 77 |

A total of 434

"In addition to this she visited sixteen schools.

"We expect to put in two other similar outposts to this during this year, as we believe this experiment under the direction of a properly trained nurse is fraught with great good to some communities far remote from medical care.

"The one great difficulty regarding this type of outpost is that the nurse is so much alone that it will be very difficult to keep the type of nurse which we demand at these points very long at a time.

"In the case of all our small hospitals there is at least one physician in the community in which they are placed so that we are not in those cases concerned with the medical attention.

"Here, then, is a practical example of what the Red Cross is doing and an evidence of the necessity of every physician being a member of the Red Cross Association, both for their financial assistance and the technical medical advice which may be given in the establishment of outposts and small hospitals. As above noted you will remember that the nurse has special instructions always to secure help of doctor if at all possible. Such work is true community service, and physicians should be in the van."

I have always been a strong exponent of full time County Officers of Health and with the associated Public Health nurses and properly trained sanitary inspectors efficient and profitable Public Health work could be carried out. It is not necessary for me to discuss this subject any further as to-morrow morning our Chief Officer of Health will read a paper on this subject, and my hope is that he will be able to tell us of some plan by which this much-to-be-desired plan will be carried out. With the County Health Officer system would undoubtedly go county laboratories.

Thus far I have spoken as a Medical Officer of Health. From now on you may think of me as a member of the Ontario Medical Association. All physicians as well as Medical Officers of Health owe a duty to themselves in several ways. First of all by so living as to keep in the best of health. He must allow a proper amount of time for recreation and reading. His reading must be general to broaden him out and scientific in order that he keep in touch with the latest discoveries in his art. He must keep fully in touch with the public and his fellow practitioners, and be a leader in all public and professional welfare work. To do this he must be a member of his local or county medical society and attend its sessions regularly, and if possible read papers on special health subjects, and join in discussions on papers read at these meetings. He should be prepared to address Women's Clubs, Child Welfare Associations, and all other rural welfare bodies. From the local society his interest should extend to the annual district meeting of the Ontario Medical Association and then to the provincial meeting as a whole. During the past six years the Ontario Medical Association has extended its sphere of influence greatly. It has made itself felt wherever the welfare of the public and the profession were concerned. It assisted the Council of the College of Physicians and Surgeons in having a proper definition of the practice of medicine put on our statute books. You are all well aware of the post graduate extension lectures which have been available for the past three years. By this means local societies had the privilege of having papers on selected subjects read at their meetings by men who had made a special study of these subjects, and thus the most recent and most authoritative knowledge on these subjects was available. When the University of Toronto wished to spread knowledge in regard to insulin and its uses, the Ontario Medical Association was selected as the means by which these clinics could be advertised and carried out. We have a committee who look into complaints as regards the Ontario Temperance Act in its relation with the medical profession. A similar committee looks into complaints against the Workmen's Compensation Board in their dealings with our profession. In every way the officers of the Ontario Medical Association endeavour to improve the status of the

profession and to assist the profession to give better service to the public, because since time began the watchword of our profession has been service. There are about eight hundred Medical Officers of Health in the province and not more than forty per cent. of these, as far as I can learn, are members of the Ontario Medical Association. I want you to consider these facts carefully and see if you would not be better officials if you did belong to our organization. Union is strength and if we have a fully organized profession we will be such a force for good in the community that many needed reforms can be carried out. We need co-operation between the Medical Officer of Health and the rest of the profession, and then between the profession as a whole and the public. A united profession loyal to each other in every way and then the public will see our ideals and help us carry them out. We can show our zeal by joining our local medical society and then the provincial body, and finally what I have said about our provincial body applies equally as well to our national organization, and we will then have a united profession from coast to coast and from the 45th parallel of latitude to the Arctic circle. Co-operation for better health should be our watchword, and it requires the help of each individual physician to make it a success. Kipling says:

"It ain't the individual, nor the army as a whole,
But the everlasting teamwork, of every blooming soul."

Teamwork, that's what counts.

The Waiting Shadow

BY SISTER OLAFIA JOHANNSDOTTIR

Translated by Rev. C. V. Pilcher, D.D., Toronto

(Concluded from October number)

CHAPTER VIII.

Olaf's proposal to her to go to America seemed like a dream—and yet she was not eager to go. Could he have understood how contagious this disease was? Could he really be keen to marry her merely to be able to look after her—to tie himself to her for life, to her who could only be a burden to him? He could not really have understood all this clearly. She would have to write and thank him for his kindness and generosity, and explain everything to him, so that he could not misunderstand how things were. And yet she put it off and put it off, she felt so dull and could not bring herself to do anything. Then her disease became active again and she lay for days together in great pain and afterwards was weak and without ambition. Often she lay and despaired of ever getting better. The one thing she wanted was to get her health so as to be able to earn an honest living. She had become reconciled to a life without joy, but she could not bear the idea of being a burden to others. Every-day she felt that she ought to write to Olaf to thank him for his exceptional kindness, but she waited to feel a little better before she could come to the point.

At last she felt able to write.

Dear Olaf,

You must forgive me for having delayed so long to answer your kind letter, but I have had a relapse and felt so ill that I could not write. I felt so good for nothing and useless that I could not bring myself to the point. Heartfelt thanks for all your goodness to me, which I realize that I have not understood. As you see, I am still here in hospital. To-day I learnt from the nurse that there is some hope that I may soon get out, and then I am going to try to get for myself a place in service and work for my living. I want to bear my misfortune as bravely as I can, and not be a burden to others. I am going to try to be as careful as I can so as not to be the cause of anyone else getting this terrible disease. You have to have an individual set of food utensils, as the spoons you eat with and the cups you drink from can convey the disease to another, if you happen to have the sore in your neck or on your lips. I intend to be so careful that no one shall get it from me.

I feel unable to accept your invitation. I am afraid you have not quite understood what a terrible disease this is. Those who have got it should never marry, as children can inherit it. Here in hospital are crowds of children who

have been born with it. People can believe that they are completely cured, and then after many, many years it can break out again in themselves or in their children. Those who have this disease ought to live alone, and never think of having a home or a mate or children. This is a part of their suffering. But the pangs of conscience would be much worse if you brought this curse on others. It is terrible to think that I should have caused you so much suffering—you who are so good and true. I could wish that you had met some girl who would have been worthy of you, as I am not. I never have been worthy, and now I am no longer a real human being, only a shadow of one.

When I get out I will place a wreath for you on Mother's grave. It hurts me to let you send me money. I shall be glad when I hear that you are happy.

Thank you for all your kindness. Best wishes.

RUTH OLSEN.

Three weeks later Ruth was discharged from the hospital. She was given a paper with instructions as to the care which she was to take.

This was late in the autumn. She had then been in the hospital over sixteen months. She felt her weakness oppress her like a great wave which was washing her down to a bottomless abyss. She took a ticket to Kampinn. If only she could avoid meeting Fransel. Mrs. Hansen was at home. "So you have come at last, you poor thing! Are you better?" Ruth asked if Fransel still lived there. "Yes." "Is he at home?" "No." "Would she lend her the key to the room?" "Yes." She went in. The bed was standing as before in the corner, and everything was exactly as it had been when she was there before—but her mother was gone! She lay down on the bed, buried her face in the pillow, and cried and cried.

It was quite dark when she heard footsteps. She sprang up and smoothed out the pillow. Fransel came in, lit a match and swore because the door had been left open. She could not slip out, but had to stand still at the end of the table. Suddenly his expression changed. "Is that you, Ruth? Where have you been all this time? Here is a bed all ready for you." His eyes burnt as he felt for her.

An agony seized her. She shot past him and rushed down the street. What was she to do? She did not dare to go in to Mrs. Hansen, he might follow her there. She went down a side street, slowly, ever more slowly. She could see nothing for herself to do. "If only I could die and lie in the churchyard beside mother!"

That evening my steps were guided so that I met her, and she obliged me by coming to my home. It was not long before she procured a situation, and was there for a year.

She used to work hard, and tried with all her might so that no one should be able to find fault with her work; but she was not strong enough; the disease sapped her strength and energy. She also felt so badly that

she had to go about, as it were, with covered face—always afraid of meeting someone who knew her in the hospital, or that one of her fellow-patients would visit her, and so those with whom she worked might get to know that she had this disease. She would have liked to have been able to have said plainly how things were, and not to have to go about in this continual dread. But who would employ anyone whom they knew to be in such a state? She had bought a cup and a knife and fork and spoon for herself, but still she was always afraid that she might be the cause of plunging another into misery, in spite of all the care she might take.

All her free time she spent with me.

Olaf wrote to her again. Yes, he knew everything, but longed to be able to help her. She might be quite sure that she could be no danger to him. He would be her friend, and had nothing to live for, except to lighten the burden of her life. Things could never be easy for her—that he knew.

And yet she could not accept his invitation. She could not think of the journey, and she could not bear the idea of being with one who knew her sad secret. Everything seemed to her out of the question. She always felt tired, and yet would not give up. She wanted above all to earn her own living. Often she felt very ill and suffered from terrible headaches. Once she had to go and lie up in hospital; but that was only for a few weeks. She was able to come out and went into service again.

So two years passed away. Then one day she tore her hand on a nail. Two days later the swelling passed up the hand into the arm. It was blood-poisoning. She was taken to the hospital. There she lay for several weeks, but the disease could not be checked; and there she passed away in great agony. That was last spring, a few days before she was twenty-two.

She had given me a little parcel to keep, in which letters and papers were wrapped, with a photograph of her mother and of herself when she had been a little girl. This she asked me to burn, if she did not come back, but I might read the papers first, if I wished. Among the papers I found the following poem:—

My Mother died and left me! She went to meet her Lord,
Released from all the sorrow the pains of earth afford;
And I was left all lonesome, with sad and broken heart,
In cold and bitter anguish, and sorrow's cruel smart.

Alone and all forsaken through this sad world I roam,
And no one grants me shelter, and no one gives a home;
While memories of childhood keep flitting through my mind,
Glad memories which only black desolation find.

I see my mother smiling—a sad smile full of pain;
She begged me to be careful—she begged, but begged in vain;
She warned me of the pathways, which to destruction lead,
Of enemies who waited—but I, I did not heed.

With loveless words and careless I went my random way;
The wisdom of her counsels I chose to disobey;
She lay at home so lonesome, as I my farewell took;
Too late I learnt the meaning of that sad lingering look!

Beneath the verses was written—"This came into my mind one night
when I could not sleep. Oh, that I could forget! Oh, that I were dead!
But what if it be true that one can never forget!"

(THE END)

The Sanitary Inspectors Association of Canada

SOME MODERN TENDENCIES IN PUBLIC HEALTH WORK.

BY ERNEST W. J. HAGUE

Chief Health Inspector, Winnipeg

(Presidential Address to 11th Annual Convention held at Fort William, Ont.,
Sept. 3-5, 1924.)

THE branches of a modern City Health Department are numerous. There seems to be a disposition, however, at the present time on the part of some Health Officers to get rid of some of their problems by transferring them to other civic departments. This has been done in some instances, and with success, as for instance: *Waterworks*—this is an engineering problem, and it may be that the actual operation of such plants should be under the direction of some other department than the Health Department. In the last analysis, however, it is the Health Officer who is held responsible for the purity of the water supply of any community. *Sewerage*—In most cities the Engineering Department is responsible for the cleansing, repairing, and operation of the sewers, but the Health Department should always exercise a certain amount of supervision over the sanitary condition of the sewers, and especially over the character of their effluent. The Health Officer will be held largely responsible for the pollution of streams and lakes. If the system of sewage disposal is a menace to the community it is the Health Department which should point this out and suggest the remedy. *Scavenging*—In some cities the scavenging is done by some other department, but once the Health Officer allows this important work to be taken over by some other department, the sanitary features of the work are apt to be neglected, unless, as in some cities, the Health Department still exercises some control over the manner of storing, collecting, and disposing of garbage and other waste materials. *Medical Supervision of School Children*—Here again there are two schools of thought, one of which maintains that this work should be under the direction of the Health Officer, and the other that it should be conducted by the Medical Officers of the School Board. There are good arguments in favor of either system. In actual practice, success depends on the way in which

the work is done, and some educational authorities are doing it very successfully. There should always exist, however, the power of the Health Officer, should the circumstances demand it, to require changes and improvements in the methods employed. In any event, there should exist a very close co-operation between the Health Officer and the Medical Officers employed by the Board, otherwise the Health Department will be seriously handicapped in the effort to control communicable diseases.

There is a tendency, however, to go much further than the above instances in curtailing the activities of Health Departments. In his book "The New Public Health," Dr. H. W. Hill gives a definition of "Public Health" as follows: "A term which includes all knowledge and all measures tending to (a) foster health, or (b) to prevent disease." *Hygiene*, he says, deals with the individual and his physical perfection; *Sanitation* with the causes and sources of those diseases which come from the outside—from the surroundings of the individual. He further subdivides sanitation into measures which (a) promote health, or (b) prevent disease. Dr. Hill points out that a general cleanliness is not sufficient, but that we must have a specific cleanliness which actually eliminates disease germs; and more than that, a specific protection against each specific disease. The *old* public health, he says, concerned itself with environment. The *new* is concerned with the individual. The old sought the sources of infectious diseases in the surroundings of man; the new finds them in man himself.

Some modern sanitary experts appear to adopt a rather narrow view of the work of a Health Department. It is urged that the principal work of a Health Officer at the present time should be the prevention of communicable disease; that we have not yet begun to control the more common communicable diseases, and that all efforts should be concentrated on this work alone.

Now concentration is all right if we know upon what to concentrate. Notable work has been done by this method. Most urban communities have so concentrated upon the purity of water supplies, proper sewerage, the installation of plumbing, the abolition of outside privies and surface wells, etc., that Typhoid Fever in these communities has been reduced to a minimum. By concentrating on rat extermination, the examination of rats, rat proofing, and the use of serum, Bubonic Plague has been stamped out in all communities where the co-operation of the inhabitants can be obtained. By cleanliness, and the destruction of body lice, Typhus Fever epidemics have been stayed. Yellow Fever is almost extinct, and Malaria is being conquered by concentration on the known methods of dealing with these diseases. Hookworm is another instance.

It will be noted that most of the success in Public Health work in the past has been attained by improving the environment of man, and the supervision of the public routes of infection.

There does not seem to be, however, much reduction in either the case rates or the mortality rates of such common diseases as Scarlet Fever, Measles, Whooping Cough, Pneumonia, Influenza, or Diphtheria. In the case of the latter, the use of the Schick Test and Toxin Anti-Toxin appears to indicate a method of concentration, which, if applied, will eventually eliminate this disease; but there do not appear to be any measures to hand which will deal effectively with the other diseases mentioned. The causative agents of Measles and Scarlet Fever have not yet been identified. No specific serums such as would confer immunity have as yet been discovered for them. Something may be done—in fact is being done—by a closer check on patients, contacts and carriers, but the public will only tolerate a reasonable amount of investigation and restriction. It would appear hopeless to expect that we shall stamp out such diseases as Measles and Influenza until some remedy conferring specific immunity against each of them is found.

After all, the great majority of people die from other causes than communicable diseases. The statistics for the U.S.A. Registration area for 1922 with a population of 94,241,643, show that Diphtheria, Typhoid Fever, Whooping Cough, Measles, Scarlet Fever and Smallpox combined only account for 3.1% of all the deaths as follows:

| | |
|--------------------------|---------------|
| Diphtheria | 1.2 per cent. |
| Typhoid | .6 " |
| Whooping Cough | .5 " |
| Measles | .4 " |
| Scarlet Fever | .3 " |
| Smallpox | .1 " |

3.1

If we add

| | |
|------------------------------------|---------------|
| Tuberculosis (all forms) | 8.2 per cent. |
| Syphilis | 1.4 " |
| Malaria | .3 " |
| Influenza and Pneumonia | 11.3 " |

The total is only 24.3 " of all deaths

It would not appear that there is much to be gained by abandoning other work now successfully carried out by Health Departments in order to concentrate on communicable diseases alone. Some of these activities

are: Milk and food inspection, child welfare work, housing and general sanitation, including the prevention of nuisances; the promotion of a general cleanliness and the teaching of personal hygiene.

Dr. Hill says that we do not know much of personal hygiene, but the excellent appendix to his book sets forth for the use of schools our present knowledge of the subject, which is not by any means meagre. In his "Sanitation for Public Health Nurses" Dr. Hill gives a most complete definition of Public Health as follows:

"The real end sought in Public Health is the physical development of the human race in such a manner as to secure, for all, true physical comfort, with high physical efficiency, and long life; and this includes not merely the promotion of health, but even more earnestly at this stage, the elimination of disease."

At the last meeting of the American Public Health Association, Dr. Charles V. Chapin, Superintendent of Health, Providence, R.I., read a paper entitled "Nuisance Prevention a Hindrance to Disease Prevention." In this paper Dr. Chapin takes a rather gloomy view of the effectiveness of present Public Health activities. A summary of his arguments would read as follows:

"All monies appropriated for the prevention of disease should be spent for that purpose alone. Money should not be spent on certain work because it may indirectly, or as a secondary effect influence public health. Too much is spent on nuisance prevention. That many of the complaints dealt with by Health Departments such as tin cans, ashes, spite fences, fertilizer on the lawn, billboards, cockroaches, mice in the pantry, unsightly buildings, trees which shade the house, bed-bugs, etc., have no important bearing on health, and that if they are to be prevented, the time of a Health Officer should not be taken up with them and the expense of so doing should not be charged to a Health Department. "It takes," says Dr. Chapin, "time and energy. It is more troublesome than any other line of health work. It touches man in his most vulnerable part, his pocket. The nuisance Inspector's life is one long fight against property. Persuasion and argument take time. The offenders leave no stone unturned. They demand to lay the case before the Health Officer himself, and his time is wasted as well as that of the Inspector." Dr. Chapin suggests that ordinary nuisances could be attended to by the Police. On the other hand he admits that general municipal cleanliness promotes personal cleanliness; that stopping river pollution has prevented great epidemics; that as privies are abolished, Typhoid toll is lessened; that work such as the protection of the water supply, extension of sewers, abolition of privies, and in certain cities the control of rats and mosquitoes constitute nuisance work which is worth while, but

thinks that much of this work might better be done by the Engineering Department.

Now Dr. Chapin is one of the most eminent authorities. His opinions carry weight. Unquestionably he is right in saying that many nuisance complaints are trivial. On the other hand, many of them are well worth investigation. Even some of the things mentioned by Dr. Chapin as trivial may at times have a bearing on health. If for instance a spite fence is erected close up to the windows of an adjoining dwelling rendering several rooms dark; or if shade trees become so heavy and close to windows as to effect the same purpose. Surely all vermin, rats, mice, cockroaches, and bed-bugs are nuisances. It is possible that rats, even in inland cities may become plague infected by rats brought in railway cars from coastal cities; and the bed-bug, like the body louse, may yet be found guilty of the transmission of disease. A really well kept city as regards the storing, collection and disposal of garbage, manure and other refuse is worth seeing. Rats and flies are kept down. It is surely important to keep the outside surroundings of our houses as clean as the inside. Nuisances from the keeping of animals are always with us. What about the deadly house-fly that we have heard so much about? Is smoke injurious to health, and can our death rate from pneumonia be reduced by the elimination of smoke? Many authorities still think it can. It is true, as Dr. Chapin says, that defective plumbing and drains have rarely any direct bearing on health? But what about the unfortunate people who have to live in houses with cellars overflowing with sewage; or in poorly built houses where the plumbing freezes in winter, thus leading to the disposal of urine and excreta in yards, cellars and other places where it may be a menace to health. It is not enough to get plumbing installed. It must be kept in working order.

To talk of the Police being required to do sanitary work in the abatement of nuisances is idle. The Police have already a multiplicity of by-laws to enforce, and have no time for investigating nuisances and finding out the persons responsible for the same, which is not always easy to determine. The work of the patrolman is principally on the front street, not in back lanes or buildings, and most cities have never enough men for Police work proper. Neither would a city save any money, because additional patrolmen would be required. In addition to this, the policemen detailed for the purpose would need special training for this work before they could act intelligently, especially in matters dealing with interior conditions in dwellings and other buildings. In the report of the Department of Health for the City of Providence published in 1923, Dr. Chapin admits that although the Police Commissioners of that city had, in August, 1920, undertaken nuisance inspec-

tion, "most of the patrolmen have not shown a great deal of enthusiasm"; and it is further evident from the report that the Health Department was still obliged to do a good deal of nuisance inspection.

Is it to be implied that no efforts are to be made to improve housing conditions, or conditions in industrial plants? Is there to be no City Department in our cities and towns charged with the duty of seeing that dwellings are kept in a habitable condition? Of what avail to spend large sums on child welfare work and the supervision of school children, if, after saving the infants' lives, they are to live in insanitary homes. The sick cannot all be hospitalized; surely their homes should be made and kept fit for occupation. Overcrowding must have some relation to health.

To hand over important work like this to some other department, or to neglect it altogether would be a grievous mistake. It takes inspectors of education and experience to deal with these matters effectively; and the man at the head of all these activities should be the Health Officer. He alone has the requisite training to properly organize and oversee the work. Building Departments are concerned with details of safety and fire prevention, and do not as a rule understand sanitation. The clause in Dr. Chapin's paper in which he refers to the constant fight with recalcitrant property owners gives an indication of one of the principal motives for desiring to devolve the duty of dealing with nuisances upon some other department. It is undoubtedly unpleasant to have to deal with such owners, but that is no reason why "George" should be asked to do it. Probably "George" would equally desire to pass the duty along. If a Health Department possesses a division of Sanitary Inspections and Housing with an experienced Sanitary Inspector at the head, there is no reason why the Health Officer should be bothered with unpleasant details. The Health Officer does the organizing and supervising. He stands ready to advise or instruct, but the hard field work must of necessity be done by the Sanitary Inspectors.

The principal reason, however, given by Dr. Chapin for handing over this work to some other department is on the ground of expense. Now if a certain fixed sum were allowed each year to a Health Officer to be allocated as he saw fit, there might be something in this argument. Unfortunately, however, City Councils have a habit of requiring itemized budgets, so that if the Health Officer decided to recommend that any branch of his work be transferred to some other department, he would simply lose the appropriation for that purpose. In any event one thing is certain, the public will demand that some department shall be made responsible for abating or preventing nuisances, and enforcing the housing laws. Life in a large city would be intolerable were it not for our Municipal by-laws.

We plead, therefore, for a larger field of usefulness for Health Departments, instead of a more restricted sphere. Anything that affects or may affect the health of citizens should come within its purview. Anything that makes for cleanliness of person or surroundings, better housing conditions, better conditions in work places, right habits of living, diet, clothing, exercise, pure food, clean milk, smoke prevention, child welfare, as well as the most important work of trying to control communicable diseases. For all of these a Health Department should find time. Let us attack all along the line. The Director in Chief of all this work for health and longevity should be the man who has been specially trained for this purpose, viz., the Health Officer. A fully modern, well equipped, and well organized Health Department paying attention to affairs perhaps of minor importance as regards health, as well as the more important, will be a power for good in the community, and will obtain the confidence and co-operation of the citizens.

I cannot close without expressing the hope that Health Officers as a class will recognize more fully the importance of employing trained Health Inspectors. A good deal is said nowadays about the necessity for improving the training of Health Officers, Laboratory Workers, Sanitary Engineers, and Public Health Nurses, but nobody has apparently broached the subject of the proper training of Sanitary Inspectors. I am referring more particularly to the U.S.A. just now, because in England the education and standing of these men is well looked after. It is rather surprising that the American Public Health Association has not apparently given any attention to this important matter.

A little work in this direction might bring surprising results in the keener interest displayed by Sanitary Inspectors in their duties, thus leading to more efficient work on the part of Health Departments in general.

Monthly Jottings of Sanitary Inspectors

Several of the Local Branches are getting down to their winter programme. The Winnipeg Local Committee has met and made arrangements for an interesting session. We hope to print a copy of the syllabus in the next issue of the JOURNAL.

The Regina members are also getting down to their winter meetings and are looking forward to a profitable time. We hope they, too, will let us have a copy of their programme for publication.

We would like to hear from Saskatoon, Edmonton, Calgary, Moose Jaw, and other Local Branches as to their doings. We desire once more to impress upon our members in those places where meetings are not being held, the immense amount of good to be obtained from such meetings as above.

Mr. Head, our new Branch President for Alberta, is laying plans for his Branch. Mr. Head is a worker and we hope the members of his Branch will get behind him in his efforts for a bigger and better Branch.

How can a Sanitary Inspector make himself indispensable to his community? Here are a few rules which may help:

1. Keep fit yourself. A sick person is not much use as a Health Instructor—and that is what a Sanitary Inspector should be.
2. Be punctual.
3. Be diligent.
4. Take a pride in your personal appearance. Many people judge by appearances only. A clean, well dressed and well set up man makes a good impression.
5. Be courteous always, and considerate in dealing with ratepayers.
6. Use tact. Learn to size-up correctly the many types of persons with whom you have to deal.
7. Always be ready to give the reasons for any request you make. Be ready and able to explain the fundamental law of health upon which any ordinance or by-law is based.
8. Be patient. Rome was not built in a day; but keep everlastingly at it.
9. Keep up to date. Read the Health Journals and various new books on Public Health and Hygiene.
10. Learn to be observant. Strive for accuracy in your reports. Omit nothing relative to the point under discussion and include nothing super-

fluorous. 11. If you are employed in a division of a large Health Department do not lose interest in other branches of health work carried on by other divisions. Know something about all of them for it may be that you will be placed in a situation where such knowledge will be indispensable. 12. Be loyal to your Health Officer and your senior officers and to the community which employs you. Don't knock the work done by fellow officers, but lend a hand to the other fellow when you can. 13. Get your brother officers together and take counsel as to how you can help both yourselves and the community.



The Provincial Board of Health of Ontario

Communicable Diseases reported for the Province for the Weeks
ending Sept. 6th, 13th, 20th, 27th, 1924

COMPARATIVE TABLE

| Diseases | Cases-Deaths | | Cases-Deaths | |
|---------------------------------|--------------|------|--------------|------|
| | Oct., 1924 | | Oct., 1923 | |
| Cerebro-Spinal Meningitis | 7 | 6 | .... | .... |
| Chancroid | 2 | .... | 4 | .... |
| Chicken Pox | 324 | .... | 196 | .... |
| Diphtheria | 396 | 24 | 286 | 13 |
| Dysentery | 6 | .... | 6 | 2 |
| Encephalitis Lethargica | 4 | 2 | 3 | 3 |
| Gonorrhoea | 146 | .... | 242 | .... |
| German Measles | 2 | .... | 1 | .... |
| Influenza . . . . . | .... | 4 | 22 | 9 |
| Measles | 887 | .... | 208 | .... |
| Mumps | 307 | .... | 40 | .... |
| Poliomyelitis | 20 | 3 | .... | .... |
| Pneumonia . . . . . | .... | 137 | .... | 90 |
| Scarlet Fever | 397 | 3 | 517 | 8 |
| Septic Sore Throat | 1 | .... | 4 | .... |
| Small Pox | 73 | .... | 23 | .... |
| Syphilis | 85 | .... | 130 | .... |
| Tuberculosis | 166 | 73 | 187 | 90 |
| Typhoid | 125 | 8 | 137 | 16 |
| Whooping Cough | 174 | 3 | 185 | 7 |
| Tetanus | 4 | 3 | .... | .... |

The following municipalities reported cases of Small Pox: Toronto 1, Chatham 3, Chatham Tp. 31, Howard Tp. 14, Harwich Tp. 2, Macaulay Tp. 1, Whitney Tp. (unorganized) 21.

Notes on Current Literature

From the Health Information Service, Canadian Red Cross Society,
410 Sherbourne St., Toronto.

Politics and Public Health.

Elimination of politics from public health work. By W. S. Rankin, M.D. "The Journal of the American Medical Association," October 25th, 1924, page 1285.

The School Dentist.

The school dentist and some of his problems. "The Child," October, 1924, page 1.

Heart Disease in Children.

Special attention in the schools of Detroit aids children with heart trouble. "City Health," August, 1924, page 5.

Nutrition Work for Pre-School Children.

A report issued by the United States Children's Bureau, based on a field study of the method of conducting nutrition work for pre-school children in nine urban and three rural communities in which some definite organized work in this field is being done. Copies may be obtained from the Government Printing Office, Washington, D.C., Children's Bureau Publication No. 138, price 5c.

Child Placing.

"Foster-home Care for Dependent Children" is the recent report from the Children's Bureau at Washington, consisting of eleven articles by representative people who are at work on the particular aspects of the problem which they discuss. Copies may be obtained from the Government Printing Office, Washington, D.C. Children's Bureau Publication No. 136. Price 30 cents.

Maternal Mortality in Canada.

An analysis of maternal mortality in Canada. By Elizabeth MacCallum, M.A. "Social Welfare," September, 1924, page 248.

Health Training in the Public Schools.

As carried out in Pennsylvania. "The Nation's Health," September 15th, 1924, page 608.

Maternal Mortality in the United States.

The trend of maternal mortality in the United States death registration area, 1900-1921. By Robert Morse Woodbury, Ph.D., Director of Statistical Research, Children's Bureau, Washington. "American Journal of Public Health," September, 1924, page 738.

Diphtheria Mortality.

A survey of diphtheria mortality in large cities of the United States. "The Journal of the American Medical Association," September 20th, 1924, page 918.

Iodine in the Treatment of Goitre.

The use and abuse of iodine in the treatment of goitre. By Duncan Graham, M.B. (Tor.). "The Canadian Medical Association Journal," September, 1924, page 821.

Nutrition of the School Child.

"Public Health Reports," U.S.P.H.S., August 29th, 1924, page 2119.

Mental Tests.

The value of mental tests to the medical officer, the educationalist and the social worker. "The Medical Officer," September 27th, 1924, page 143.

Junior Red Cross Handbook.

Issued by the New Brunswick Division of the Canadian Red Cross Society. Copies may be obtained on application to the New Brunswick Division, Canadian Red Cross Society, 72½ Prince William Street, St. John, N.B.

Scarlet Fever Immunization.

The Dick Test and active immunization against Scarlet Fever. By Dr. Abraham Zingher, New York City Department of Health. "Public Health News," October, 1924, page 320.

Health Problems of the Schoolroom.

A message to nurses and teachers regarding defects and diseases of school children. "The Public Health Nurse," October, 1924, page 515.

National Conference of Victorian Order of Nurses

Victorian Order Nurses from all parts of the Dominion met in the City of Ottawa during three of the most perfect days of the Canadian year, September 24th, 25th, and 26th.

These fifty-five devoted nurses, enthusiastic in the service of so great a cause, garbed in the attractive two-blue uniform of the Victorian Order, were representative of all phases of public health activities throughout the country.

Meeting thus in one of the most successful gatherings in the history of the Order, nurses from the East co-related ideas of service with nurses from the West, and discussed local problems for mutual benefit. In addition to strengthening the bonds that exist among those who group together for the betterment of humanity, guided by that spirit of service which characterises the Victorian Order nurse, the business of the Conference was concerned with the larger matters that effect the Order, nationally.

Much was accomplished during these short days in the way of interchange of ideas resulting in recommendations of benefit to the nurses themselves, and the work of the Victorian Order as a whole, which, being "for Canada," is translated as beneficial to the future health of all Canadian peoples.

Resolutions affecting the policy of the Order were presented to the Advisory Committee on Nursing for the Executive Council of the Victorian Order for Canada, on Friday morning, September 26th. Mrs. R. W. Reford, Montreal, Convenor of the Committee, presided at this meeting and received the recommendations from the nurses.

The representative nurses were as follows: Miss E. L. Smellie, Chief Superintendent; Miss Bertha E. Hall, Assistant Superintendent; Miss Mary Boswell, Eastern Supervisor; and Miss Mary Stevenson, Central Supervisor for the Central Board.

British Columbia—Mrs. Eva D. Calhoun, Dist. Supt., Vancouver.

Alberta—Miss Harriet Ashe, Calgary.

Saskatchewan—Miss Olive Rae, Saskatoon.

Manitoba—Miss A. L. Prichard, Dist. Supt. Winnipeg.

Ontario—Miss Edith Campbell, Dist. Supt., Toronto; Miss M. F. Jackson, Dist. Supt., Ottawa; Miss Gray, Renfrew; Miss L. M. Henry, Waterloo; Miss Edith Leeder, Kingston; Miss Hettie Crowe, Pembroke; Miss Hanna, Hamilton; Miss A. C. Sargeant, Cornwall; Miss Sadie

Savage, Preston; Miss Anna McKee, Galt; Miss E. M. Hughes, Toronto; Miss Cowan, Sarnia; Miss Winnifred Hawkins, New Liskeard; Miss B. W. McRoberts, Smith's Falls; Miss Taylor, Brantford; Mrs. L. M. Kelly, Brampton; Miss M. Duffield, London; Miss A. Howe, St. Catharines; Miss Latimer, Miss Isabel McCann, Miss A. St. Marseille, Miss Suzanne Smythe, Miss Le Couteur, Miss Stella Powers, Miss Jean McEwen, Miss Hazel Latimer, Miss Alice Beauchamp.

Quebec—Miss Margaret Moag, Dist. Supt., Montreal; Miss Nash, Miss Christine Dowling, Mrs. Mary Moore, Miss Sigsbee, Miss Ethel Graham, Montreal; Miss Findlay, Miss Mabel Hardie, Lachine; Miss Lanctot, Ste. Anne de Bellevue; Miss Grace Cunningham, Westmount; Miss E. M. Ratz, Sherbrooke.

Nova Scotia—Miss Mary F. Campbell, Dist. Supt., Halifax.

New Brunswick—Miss Dora Coates, Dist. Supt., St. John; Miss Pansy Burns, St. John; Miss Jessie Lower, Fredericton; Miss Elizabeth Wedic, Marysville; Miss Ada Burns, Sackville, N.B.

The first concern of the Conference presided over by Miss Smellie, Chief Superintendent, was the consideration of a Nursing Manual, covering their general routine care for patients in the home and other activities. After general discussion it was decided that the Manual should be published and distributed at as early a date as possible subject to the approval of the Executive Council.

The statistical report forms for compiling the work of the nurses of the Order were considered and many changes and additions as presented by Miss Bertha Hall, Assistant Superintendent, were discussed and approved. It is thought that the new revised report forms will now present a more complete and adequate picture of the services rendered for the people of Canada by the Victorian Order Nurses.

Mrs. J. B. Fraser entertained the Conference very delightfully during the tea hour at the Country Club, Aylmer, one of Ottawa's most beautiful and exclusive resorts.

Miss Smellie and Miss Hall were joint hostesses at a most enjoyable and informal reception in the Daffodil Tea Rooms at 8.30 p.m. Wednesday, September 24th.

The Conference meeting at 8.30 a.m. Thursday morning, September 25th, was urged to subscribe to all current literature dealing with the various aspects of public health work, and then lengthy discussions ensued on matters such as Insurance for Nurses, Hours on Duty, Uniforms, Status of Nurses, Salaries, Fees, Co-operation and Publicity. All representatives took a free and enthusiastic part in the discussions.

Resolutions were framed concerning the care of nurses who contract illness while in the service of the Order, with the matter of more specific

rulings for the carrying on of the activities of the Victorian Order to-day under Royal Charter, and concerning certain changes in uniform. These resolutions were presented to the Advisory Nursing Committee for the Executive Council on Friday morning, September 26th, by Miss Boswell, Eastern Supervisor, and they will be considered by the Executive Council meeting October 16th, 1924.

On Thursday evening friends of the Order were waiting outside the entrance to the Carnegie Library where the meetings of the Conference were held, to take the nurses for a motor drive on the Ottawa Drive-way, Canada's most beautiful highway. The route lay along the Rideau Canal to its junction with the Ottawa River, through Major Hill Park with its magnificent view of the river spanned by the Interprovincial Bridge connecting the sister cities Ottawa and Hull, one representing English-speaking, and the other French-speaking Canada. Beyond Hull, into Quebec, lay the long low line of the Gatineau Hills softly tinted in Autumn colouring. To the left, up the river, could be seen the shimmer of the Chaudiere Falls as the narrowed waters of the Ottawa tumbled over their rocky descent to the broad expanse below, where just at the junction of the Rideau Canal rose Parliament Hill, like an Imperial Crown, its base a mass of flaming maple trees colouring to the water's edge while at its summit the Parliament Buildings with their gray Gothic towers dominated the whole scene. Following the Driveway along the river to Rockcliffe, Ottawa's natural park, the grounds of Rideau Hall were soon reached. This being the home of the Honorary President of the Order, Her Excellency, the Lady Byng of Vimy, was of particular interest to the nurses. From Rockcliffe the drive continued out to the Dominion Experimental Farm; the return to the city being made in the glow of an autumn sunset.

The Executive Council entertained at luncheon, Thursday, Lady Borden presiding, when Major-General Ashton, Dr. Gunn, Mr. Frank Lynch, Mr. E. S. Houston, Mrs. J. B. Fraser, and Colonel A. Z. Palmer represented the Executive Council. Mrs. R. W. Reford also was hostess at luncheon at the Chateau Laurier on Friday.

The three-day Conference ended with an inspection of the Central Offices in the Jackson Building, and interviews with the Chief Superintendent, Miss Smellie.

News Notes

The Provincial Board of Health of British Columbia in pursuance of its policy of dividing the province into health districts with self sustaining units is establishing a laboratory in the middle interior of the province in the city of Kamloops.

This laboratory will be established in the Royal Inland Hospital and will serve the interior of the province which includes a large fruit district and a number of towns, and in addition will work in conjunction with the staff of the Tranquille Sanatorium.

There has been an outbreak of pneumonic plague reported from Los Angeles, California, between 35 and 40 cases with a mortality of about eighty per cent.

The Provincial Board of Health of British Columbia in conjunction with the Quarantine Station, Dr. Brown in charge, have taken all precautions for the protection of our ports and are requiring all coastal steamers to report to the Quarantine Station, William Head.

We will be advised by the Federal Department of Health at Ottawa of measures taken by the United States Public Health Service. The matter is well in hand at Los Angeles under the efficient supervision of the United States Public Health Service.

There have been during the summer a great many cases of Polio-myletis in the States of Washington and Oregon to the south of us. The attack for a time assumed rather serious proportions, but it is now on the wane.

Very cordial relationship exists between the Health Officers of British Columbia and of the States to the south of us.

We are kept fully informed of conditions by the Pacific Coast Health Officers Association, comprised of the Health Officers of California, Oregon, Washington and British Columbia, together with laboratory officials.

This Association was formed three years ago and very successful and informative meetings have been held each year. The Health Officials of the Hawaiian Islands have asked to be included in the Association.

Dr. Thorwald Madsen, Director of the Danish State Serum Institute and Chairman of the Health Committee of the League of Nations, who

has been the guest of the Rockefeller Foundation in the United States for the last month, spent November 14th and 15th in Toronto, visiting the University of Toronto and the Public Health Departments. He also visited the I.O.D.E. Preventorium. Dr. Madsen addressed an open meeting of the Medical Society of the University of Toronto on Friday, November 14th. In the long series of addresses by Dr. Madsen in America this was the only one given before an undergraduate organization.

Dr. J. G. Fitzgerald, Professor of Hygiene and Preventive Medicine, University of Toronto, delivered the first DeLamer lecture at the School of Hygiene and Public Health, Johns Hopkins University, on October 13th.

Dr. J. J. Heagerty, Dominion Department of Health, Dr. R. R. McClenahan, Provincial Board of Health of Ontario and Dr. Gordon Bates, General Secretary of the Canadian Social Hygiene Council attended the National Social Hygiene Conference in Cincinnati on November 19th-22nd.

Mrs. Clive Neville Rolfe, O.B.E., General Secretary of the National Council for Combating Venereal Diseases in Great Britain, who has just completed a lecture tour in the United States, is coming to Canada on November 24th, under the auspices of the Canadian Social Hygiene Council. The following itinerary has been arranged for Mrs. Rolfe while in Canada: Toronto, November 24th and 25th; Hamilton, November 26th; Brantford, November 27th; Ottawa, November 28th, 29th and 30th; Montreal, December 1st and 2nd; Peterborough, December 3rd; St. Catharines, December 4th; London, December 5th; Windsor, December 6th.

The correct number to date, of the municipalities of the Province of Quebec which have complied with the order of the Director of the Provincial Bureau of Health to make vaccination compulsory in their territory are as follows:

Of 1,350 municipalities, 927 have complied with the order. Of the remaining 423, two have refused to pass the required by-law, 224 are still carrying on a correspondence with the Board and 197 are expected to answer any day.

The Director of the Provincial Bureau of Health has given this order under Section 8, par. 3, of the Quebec Public Health Act which

authorizes him "in the interest of public health, to compel municipal councils to exercise and enforce such of their powers as, in his opinion, the urgency of the case demands".

In this particular instance, the urgency was caused by the epidemic of smallpox of the beginning of this year in Windsor and other towns of Ontario.

A preliminary series of eight cases of general paralysis of the insane, are now undergoing malaria treatment, in The Provincial Mental Hospital, Ponoka, Alberta. The disease was transmitted by the intravenous injection of 5 c.c. of whole blood, from a case of benign tertian malaria. All the patients began to run an irregular temperature within forty-eight hours, and at about the seventh day the typical malarial chills began. Another series of ten cases have just completed a course of tryparsamide, with distinct serological improvement. The clinical improvement has not been so encouraging. It is yet too early to form an opinion as to the value of the treatment.

All the Venereal Disease Clinics in the Province of Alberta, are now held in the out-door departments of the hospitals, or in connection with the Municipal Public Health Clinics.

The Home Nursing classes, which are now being organized throughout the Province, by the Alberta Branch of the Canadian Red Cross Society, are meeting with popular approval.

"The Canadian Nurse," a professional magazine owned and published by the Canadian Nurses' Association, has appeared in a new costume since its offices have been moved to Winnipeg. This has always been a useful magazine but the October number, with its many changes in make-up, gives promises of rating among the best professional magazines published in this country or elsewhere.

"The Canadian Nurse" is published at 609 Boyd Building, Winnipeg, and issued monthly for \$2.00 a year.

Book Reviews

"*Graded Outlines in Hygiene*"—Book II. By Walter Frank Cobb, M.D., B.P.E. Cloth. Pp. 387. Yonkers-on-Hudson and Chicago: World Book Company, 1924.

Much of the material contained in the book is commendable. The majority of the Healthgrams would be understood and enjoyed by the children and many lessons are written in a way to hold their interest. Much of the material is practical if at times somewhat advanced. Many of the assignments are not suited to the grade—page 53—grade four required to write a composition on "Buying Health by the Bottle". Some are not suitable for school children of any grade—page 53—"God Heals and the Doctor Takes the Fee".

The definition of Health on page 11 is of little real value to anyone. The marked sentence on page 12 (paragraph 2, line 3) would perhaps, with some explanation from the teacher, bring forth more discussion from the pupils of this grade than any other subject.

The book does not express my idea of a really valuable teacher's reference text. Lessons prepared in every detail for the teacher in this way are likely to be presented in a dull mechanical manner. I much prefer the reference text which suggests material but leaves the lesson planning to the teachers.

R. M. S.

The following books have been received, and the courtesy of the publishers in sending them is hereby acknowledged. Reviews will be made of these volumes from time to time.

"*Minor Surgery and Bandaging*." By Gwynne Williams, M.S., F.R.C.S. Published by The Macmillan Company of Canada, Ltd., Toronto. Price \$3.15.

"*Applied Chemistry for Nurses*." By Stekka Goostray, R.N., and Walter G. Karr, M.S., Ph.D. Published by the Macmillan Company, New York. Price \$2.00.

"*The Modern Practice of Tooth Extraction*." By Lester Richard Cashn, D.D.S. Published by the Macmillan Co., New York. Price \$2.00.

"*The New Hygiene*." By H. W. Hill, M.D., D.P.H., L.M.C.C. Published by the Macmillan Company of Canada, Ltd., Toronto. Price \$3.00.

"*Infantile Paralysis in Vermont—1894-1922*." Published by the Vermont State Board of Health.

Publications received, other than books.

"*Hand Book for Sanitary Inspectors*." By George G. Melvin, M.D., D.P.H.

Editorial

OBITUARY

DR. W. RAY HODGE

Following a week's illness the death occurred on Saturday, November 1st, of Dr. W. Ray Hodge at his late home, 33 Roxborough Drive, Toronto, from pneumonia. The late Dr. Hodge was born in London, Ontario, on March 4th, 1890, and was the only son of the late Dr. George and Mrs. Hodge (Agnes Ray). He received his preliminary education in the London Collegiate Institute, matriculating in 1908. Entering the University of Toronto he took the honour course in the physiological and biochemical sciences, and obtained first-class honours throughout his course, winning first in his class on graduation in 1912, when he received the degree of B.A. He subsequently entered the medical course, and received his degree of M.B. in 1915. In the same year he became a member of the College of Physicians and Surgeons of Ontario.

He enlisted as a private in the C.A.M.C. No. 2, C.C.S., shortly after the outbreak of war, and proceeded overseas early in 1915. Dr. Hodge received an Imperial Commission in the Royal Army Medical Corps in May of 1915, and went to Egypt with the 94th Field Ambulance. After some months he was promoted to a Captaincy in the R.A.M.C. and was stationed at Kantara in the Canal Zone. When his unit was later ordered to France, Dr. Hodge saw service there. Later still he was sent to Mesopotamia, from which theatre of war he was invalided in 1916. He returned to Canada late in 1918, when he was seconded to the D.S.C.R. with which organization he served as a medical officer during the remainder of 1918 and 1919.

In 1920 Dr. Hodge received an appointment as junior demonstrator in medicine in the Department of Medicine, University of Toronto, and was an assistant physician in the Toronto General Hospital. He also held the appointment of Research Associate in the Connaught Laboratories, University of Toronto. The deceased was a Fellow of the Academy of Medicine, Toronto, and of other medical organizations.

Dr. Hodge had already made important contributions to medical literature, and was in the midst of important researches at the time of his death. He was an outstanding member of his profession, and one who gave promise of splendid achievements in his chosen field of work.

The late Dr. Hodge was married in 1918 to Miss Mary Wight Moffat. He is survived by his widow, one daughter, his mother and three sisters. He is deeply mourned also by a wide circle of friends, and by his colleagues in the medical profession at large, and in those departments of the University of Toronto of which he was a member.

